

Two New Cave Spiders From Okinawa Island (Genera *Falcileptoneta* and *Masirana*, Leptonetidae)

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Falcileptoneta okinawaensis n. sp.

(Japanese name: Okinawa-mashiragumo)

Loc. and date: Shimuku-ana cave, Namihira Yomitanson, Aug. 22, 1970,
1 adult male and 1 adult female.

Collector:—Shōei SHIMOJANA

Holotype (♂): Total length 1.90 mm.; cephalothorax, length 0.82 mm., width 6.6 mm.; abdomen, length 1.10 mm., width 0.80 mm. Leg I 6.01 mm. (1.55+0.26+1.78+1.44+0.98). Leg II 4.32 mm (1.18+0.25+1.19+0.96+0.78). Leg III 3.68 mm. (0.99+0.24+0.91+0.87+0.61). Leg IV. 4.62 mm. (1.33+0.25+1.36+1.11+0.77). Palp 1.49 mm. (0.60+0.22+0.23+0.44). Eyes: Ratio of major diameter, 1st:2nd:3rd=5.0:4.3:4.0. Ratio of interval, 1st-1st=0.2, 1st-2nd=0.3, 2nd-3rd=0.1, 3rd-3rd=0.1. Ocular area longer than broad is 12:10.5. Clypeus=9.0. Vertical axes of the 2nd eyes intersect backwards. 3rd eyes run in parallel.

Color (in alcohol): Cephalothorax, sternum, labium and legs dull orange in ground color with the patterns of chocolate. Chelicerae dark orange. Abdomen pale pink in ground color with the pattern of chocolate.

Cephalothorax short oval in shape. Anterior margin recurved as seen from above. As seen from side, half as high as the length. Needle-shaped median furrow is black. Promargin of the fang furrow armed with 8 teeth are arranged equidistantly. Retromargin with 9 denticles. Sternum as broad as long 26:25 in ratio, rather rounded posteriorly. Labium broader than long 10:8 in ratio. Anterior margin procurved and with 3 pairs of hairs. Endites are normal in shape. Legs formula 1423. Spination: Femora I, prolateral 0-1-0; II-IV, none. Patellae I-IV, apical 1. Tibiae I, dorsal 0-0-1, retralateral 0-0-1; II, dorsal 1-0-1, retrolateral 0-0-1; III, dorsal 1-0-1, pro-

lateral 0-0-1, retrolateral 0-0-1; IV, dorsal 0-1-0, prolateral 0-0-1, retrolateral 0-0-1. Metatarsi I, none; II, ventral 1-0-1; III, retrolateral 0-1-0, ventral 0-0-1; IV, ventral 0-0-1. Each proximal part of the tibiae with two dorsal trichobothria. Distal part of the metatarsus I with a dorsal trichobothrium. Each middle part of other metatarsi with a dorsal trichobothrium. On the proximal end of the ventral parts of metatarsi II and III armed with a transversal row of several hairs. Ventral parts of tibiae I and II with a pair of rows of many slender hairs.

Palp: Tarsus is concave. Outside with a branch projecting downwards. Tibia with three trichobothria. Retrodorsal side of the tibia with two apophyses. One has a basal segment, the other simple and slender. Femur lacking spines, with hairs. Embolus is very long and curved.

Paratype (♀): Rather larger than the male and endites are normal in shape.

This species can be distinguished from other species by the shape of the apophyses of the palpal tibia of the male.

***Masirana longipalpis* n. sp.**

(Japanese name: Udenaga-hinamashiragumo)

Loc. and date:—Nisshū-dō cave Kin Kinson, Aug. 25 1970, 1 adult male, 1 adult female.

Collector:—Shōei SHIMOJANA

Holotype (♂): Total length 2.7 mm.; cephalothorax, length 1.2 mm., width 0.91 mm.; abdomen, length 1.5 mm., width 1.0 mm. Legs: Leg I 13.49 mm. (3.73+0.37+4.18+3.33+1.87). Leg II 9.84 mm. (2.84+0.34+2.94+2.29+1.43). Leg III 8.96 mm. (2.29+0.31+2.21+1.94+2.21). Leg IV 20.46 mm. (6.11+0.64+6.13+4.91+2.67). Palp 5.71 mm. (2.53+0.62+2.07+0.49). Eyes: Ratio of major diameter, 1st: 2nd: 3rd=6.0:5.5:4.2. Ratio of interval, 1st-1st=0.1, 1st-2nd=0.05, 3rd-3rd=0.1, 2nd-3rd=5.0. Clypeus=19.5. Ocular area; longer than broad is 19:10 in ratio. Vertical axes of the 2nd eyes intersect backwards. 3rd eyes run in parallel. 2nd and 3rd eyes have a tendency of degeneration. Each side of the 3rd eyes with a black hair.

Color (in alcohol): Cephalothorax, legs and sternum are yellowish brown. Maxillae and chelicerae darker. Abdomen pale chocolate in ground color with a whitish cardiac area. Carapace short oval is longer than broad. Head region narrowed and the anterior margin recurved. As seen from

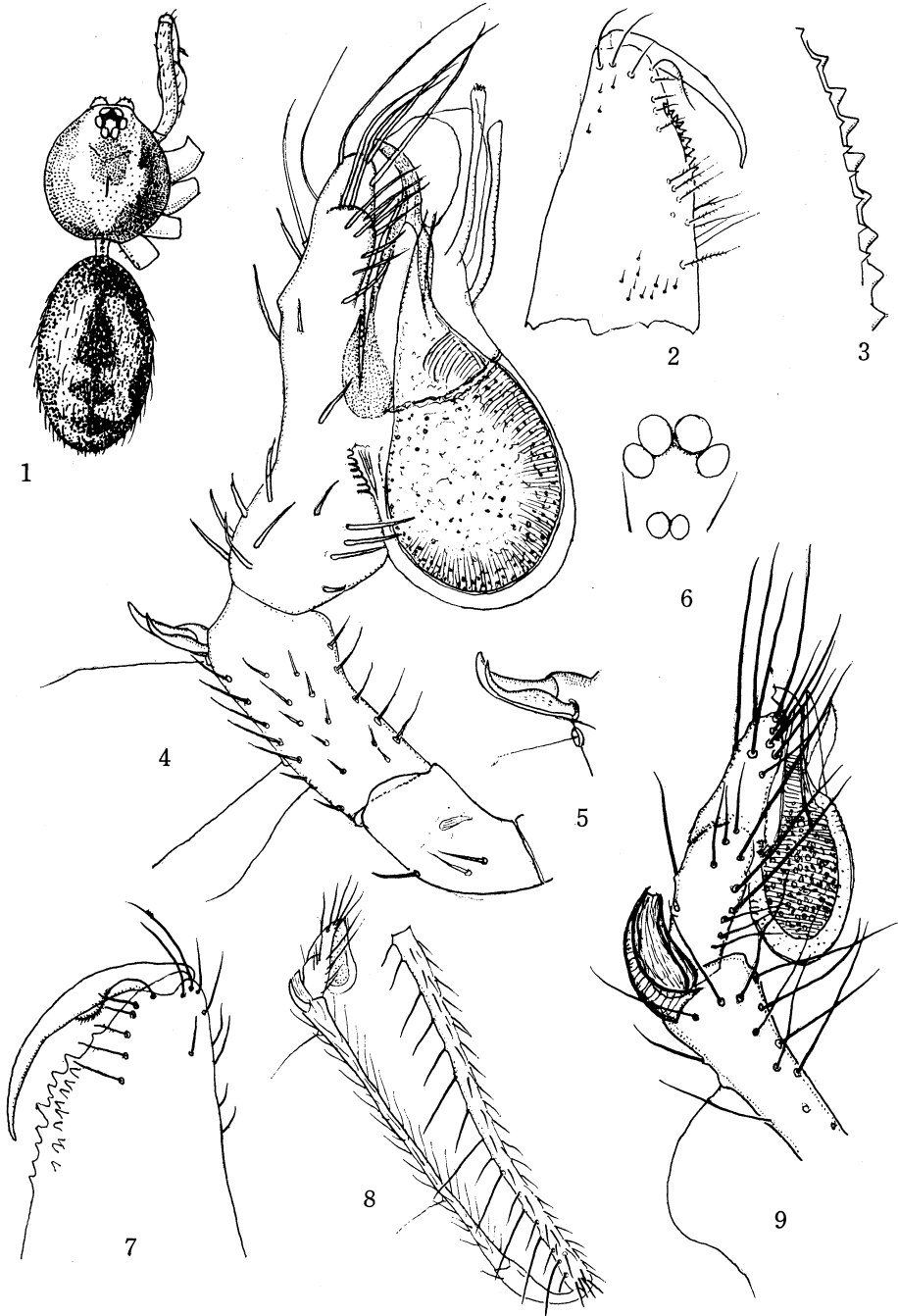
side, three-fifths as high as the length. Sternum cardioid, measured without lip, longer than broad is 60:55 in ratio. Labium broader than long is 15:7. Anterior margin procurved weakly and armed with 4 pairs of hairs. Endites; outside not so concave, rather parallel. Promargin of the fang furrow with ten teeth. The 10th tooth is removed from the 9th by a space as wide as twice the latter. The 6th tooth is small and arranged irregularly. Arrangement of nine denticles of the retromargin is very irregular.

Legs: Formula 4123. Legs are long. Especially 4th leg very long. Tarsus III is longer than metatarsus III. Metatarsi and tarsi of all legs have many pseudosegments. Onychium with serrated bristles. Upper claws with six or seven teeth and the median claw with a curved tooth. Each proximal end of all femora armed with a ventral bristle. Spination: Femora I-IV, none. Patellae I-IV, apical 1. Tibiae I, dorsal 1-0-1, prolateral 1-1-1, retrolateral 0-1-1; II, dorsal 0-0-1, prolateral 0-1-1, retrolateral 0-1-1-0; III, dorsal 1-0-1, prolateral 0-1-1-1, retrolateral 1-0-1; IV, dorsal 1-0-0, prolateral 0-1-1, retrolateral 0-1-1. Metatarsi I, ventral 0-1-0; II, prolateral 0-1-0, ventral 0-1-0; III, prolateral 1-0-0, ventral 1-0-0; IV, retrolateral 1-0-0, ventral 1-0-0. Each proximal part of the tibiae with 2 dorsal trichobothria and distal part with 2 retrolateral trichobothria. Each proximal end of the ventral parts of metatarsi II and III armed with a transversal row of several hairs.

Palp more than twice as long as the length of the body. Femus>tibia>patella>tarsus. Ventral side of the femur with many bristles increasing in length distally. Patella and tibia have no bristles. Dorsal part of the tibia with two trichobothria, and the apical end with a brandy-glass-shaped projection is enfolded with a curved apophysis. Middle part of the tarsus with a transverse depression. Outside of the tarsus without a branch. Bulb: One-third as broad as long. Two laminae cross each other. One is smooth and the other is serrated. Emborus large and curved.

Paratype (♀): Rather larger than the male. Palp is normal in size and its femur without bristles.

This species is distinguishable from *Masirana longimana* Yaginuma 1970 in the manner of palpal tibia of the male.



Figs 1-5. *Falcileptoneta okinawaensis* (male). 1. Dorsal aspect. 2. Right chelicera. 3. Right chelicera. 4. Retrolateral aspect of right palp. 5. Apophyses and a trichobothrium of palpal tibia.

Figs. 6-9. *Masirana longipalpis* (male). 6. Ocular area. 7. Left chelicera. 8. Retrolateral aspect of right palp. 9. Retrolateral aspect of palpal tibia and tarsus.